

- - 596

5 32' · ·

FIG.2

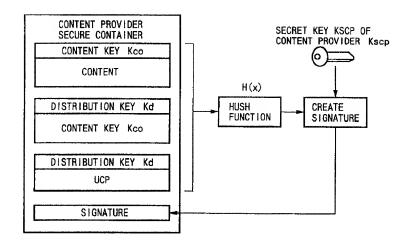
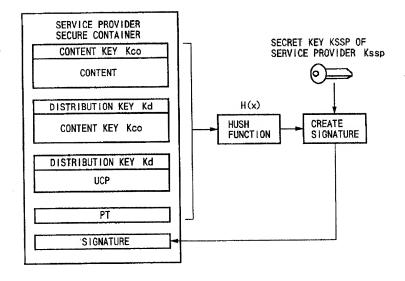


FIG.3



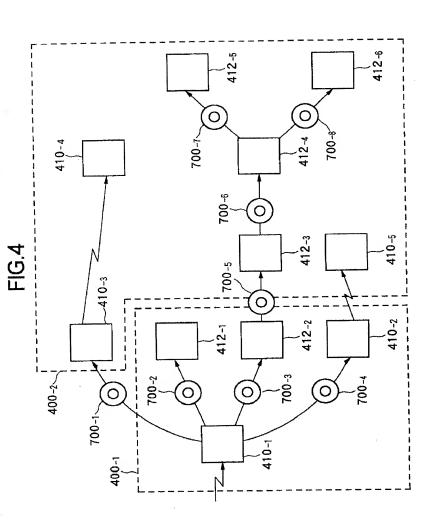
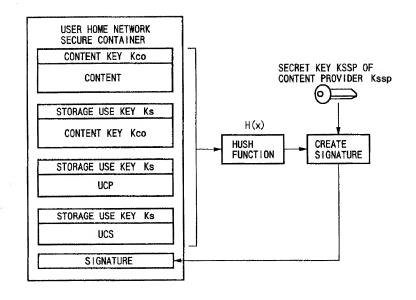
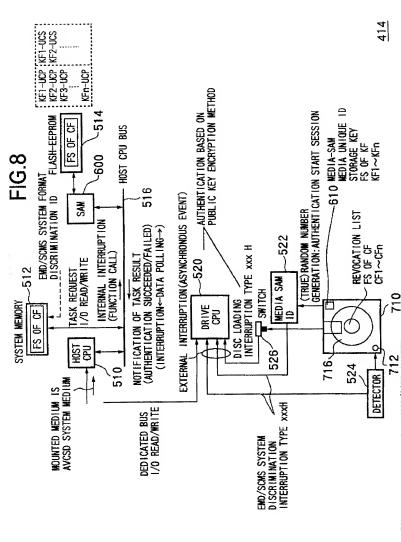


FIG.5



SAGE CONTROL POLICY(UCP)
VERSION (VERSION NO.)
CONTENT ID FOR MANAGING ASSET MANAGEMENT AT CONTENT PROVIDER
SIGNATURE (CONTENT PROVIDER SECRET KEY)
GLOBAL UNIQUE CONTENT ID FOR MANAGEMENT OF THIRD PARTY RELIABLE ORGANIZATIONS
SIGNATURE (SECRET KEY OF THIRD PARTY RELIABLE ORGANIZATIONS)
COUNTRY, AREA CODE
CONTENT PROVIDER INFORMATION
AUTHORING DATE
ISSUER INFORMATION: THIRD PARTY RELIABLE ORGANIZATION INFORNATION
ISSUE DATE
EXPIRATION DATE (VALIDITY)
COMMUNICATION ADDRESS OF THIRD PARTY RELIABLE ORGANIZATION
DISTRIBUTION SERVICE PROVIDER INFORMATION TYPE INFORMATION OF CONTENT() MOVIE/MUSIC/PROGRAM/CM/PR MATERIAL
TYPE INFORMATION OF CONTENT® ORIGINAL/SECONDARY USAGE/EDITED WORK
TYPE INFORMATION OF EXPRESSION OF CONTENT() MOVING PICTURE
IMAGE, STATIC IMAGE, AUDIO, ETC.
TYPE INFORMATION OF EXPRESSION OF CONTENT② SIGNAL PARAMETERS,
COMPRESSION METHOD
HANDLING AND CONTROL INFORMATION FROM USAGE SPACE EXAMINATION ACCESS CONTROL INFORMATION FROM CONTENT PROVIDER
ACCESS CONTROL INFORMATION FROM USER (INITIAL VALUE)
HANDLING POLICY CONCERNING MILEAGE AND DISCOUNT COUPON
RECOMMEND SETTLEMENT MEANS:THIRD PARTY RELIABLE ORGANIZATION/ELECTRONIC MONEY SETTLEMENT
HANDLING AND CONTROL INFORMATION FOR LISTENING TO DEMO SAMPLE (SEMI-PUBLIC PARAMETERS)
SALE MANAGER OF CONTENT (PRODUCT) / SALE COUNTRY, AREA CODE
USAGE CONTROL PRICE IN EACH TYPE OF PURCHASE IS WHOLESALE PRICE PROMOTION USE FREE SERVICE PERIOD/NUMBER OF TIMES RE-DISTRIBUTION UPPER LIMIT OF COPIES (>SELL THROUGH)
SELL THROUGH PRICE OF ONE COPY/TWO COPIES/N COPIES
①COMPLETE
②TIME LIMITED ③PAY PER PLAY N
SELL THROUGH-SCMS COPY FREE/ONE COPY/NO COPY /ONE COPY HAS BEEN MADE RECORDING CHARGE PAY PER SCMS COPY N COPY CONTROL TICKET PURCHASED NUMBER PAY PER COPY PAY PER BLOCK COMPATIBLITY WITH SCMS APPARATUS
(1) EMD> SCMS
②)SCMS>EMD

USAGE CONTROL STATUS (UCS	>									
CONTENT ID FOR MANAGIN	G ASSET MANAGEMENT AT CONTENT PROVIDER									
SIGNA	TURE (CONTENT PROVIDER SECRET KEY)									
GLOBAL UNIQUE CONTENT ID ORGANIZATION	FOR MANAGEMENT OF THIRD PARTY RELIABLE									
SIGNATURE (SECRE	T KEY OF THIRD PARTY RELIABLE ORGANIZATION)									
SERVICE PROVIDER INFOR	MATION									
DISTRUBUTION SERVICE N	AME									
CONTENT ID FOR MANAGEMEN	NT OF DISTRIBUTION SERVICE AT SERVICE PROVIDER									
SIGNATURE	(SERVICE PROVIDER SECRET KEY)									
ISSUER INFORMATION HNG-	-ID/SAM_ID/MEDIA SAM_ID									
PURCHASER INFORMATION U	SER ID									
SETTLEMENT MEANS SELECTED THIRD PARTY RELIABLE ORG.	D BY PURCHASER ANIZATION/PASS FROM HAND TO HAND (ELECTRONIC MONEY)									
PURCHASER SETTLEMENT MEA										
①BANK, REGISTERED ACCOUNT ②CREDIT CARD COMPANY ③CREDIT CARD NUMBER										
PURCHASE TRACE INFORMATI	ON									
(FIRST PURCHASE)	PURCHASE DATE/PURCHASER INFORMATION/ ISSUER INFORMATION									
	PURCHASE APPARATUS INFORMATION/PURCHASE MEDIUM INFORMATION, ETC.									
(SECOND PERCHASE)	PURCHASE DATE/PURCHASER INFORMATION/ ISSUER INFORMATION									
	PURCHASE APPARATUS INFORMATION/PURCHASE MEDIUM INFORMATION, ETC.									
(N-TH PURCHASE)	PURCHASE DATE/PURCHASER INFORMATION/ ISSUER INFORMATION									
	PURCHASE APPARATUS INFORMATION/PURCHASE MEDIUM INFORMATION, ETC.									
CONTENT SALE PRICE PT (PRICE TAG)									
COUNTRY, AREA CODE AT PURC										
USAGE SPACE EXAMINATION I	NFORMATION(ID LIST OF EACH ENTITY)									
DISCOUNT INFORMATION POSS (MILEAGE/DISCOUNT COUPONS	SESSED BY PURCHASER IN DISTRIBUTION SERVICE S)									
	SESSED BY PURCHASER AND USER IN PURCHASE (MILEAGE/DISCOUNT COUPON)									
USAGE CONTROL										
REPRODUCTION CHARGE PAY	(-PER-USE)									
UPPER LIMIT OF COPIE PRICE OF ONE COPY/TM	S(>SELL THROUGH) 10 COPIES/N COPIES									



FOR DISCRIMINATION OF AVCSD/SCMS SYSTEM MANUALLY SWITCHED BY SELECTION OF USER

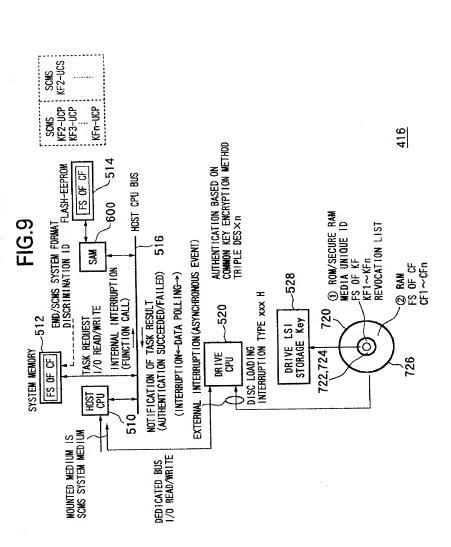


FIG.10

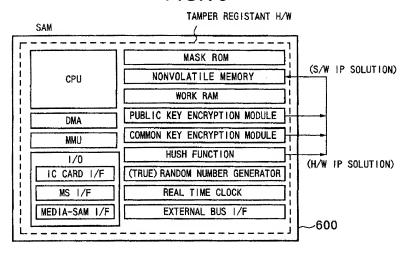


FIG.11

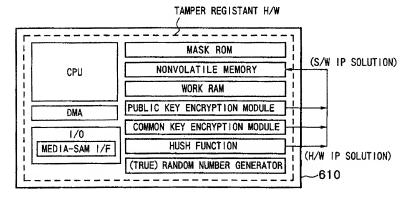


FIG.12

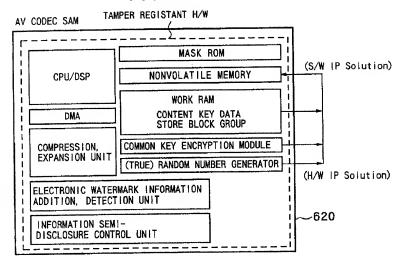


FIG.13

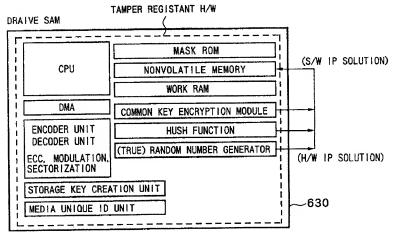
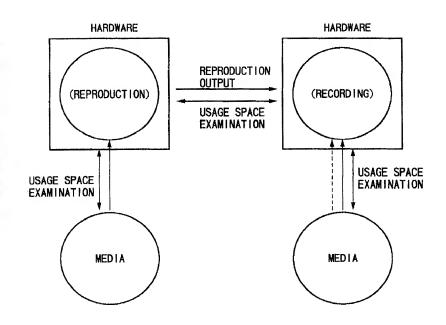


FIG.14



CONTENT USAGE CONTROL POLICY UCP/UCS, U-TOC

EMD SYSTEM CONTENT/SCMS SYSTEM CONTENT U-TOC RIGHT CLEARING OF CONTENT UCP SIGNAL PARAMETERS, COMPRESSION CODEC METHOD UCP DISPLAY FUNCTION OF RECOMMENDED MONITOR UCP PERSONAL INFORMATION (PURCHASER INFORMATION) UCS RIGHT CLEARING (PROFIT DISTRIBUTION) DATA UCS

CONCERNED ENTITY ID CONTENT PROVIDER ID SERVICE PROVIDER ID THIRD PARTY RELIABLE ORGANIZATION ID

REPRODUCTION APPARATUS HNG-ID EMD SYSTEM APPARATUS/SCMS SYSTEM

APPARATUS
BIT STREAM RECODER OR/NOT
SIGNAL PARAMETERS

COMPRESSION CODEC METHOD
DISPLAY CAPABILITY OF MONITOR
CONNECTED

FORMAT CONVERSION FUNCTION EXISTS/NOT EXIST

(WHERE IT EXISTS, WHICH CONVERSION FUNCTION IS HELD?)

EG. 1BIT, 1.2882M→16BIT, 44.1K RIGHT CLEARING (PROFIT DISTRIBUTION) USE DATA

ID OF CONCERNED ENTITY APPARATUS ID

ORGANIZATION

APPARATUS ID

ORGANIZATION.

AFFARIUS ID

OF APPARATUS DEVELOPING MANUFACTURER
ID OF OTHER CONCERNED ENTITY TO WHICH
PROFIT SHOULD BE DISTRIBUTED
ID OF REGISTERED THIRD PARTY RELIABLE

MEDIUM MOUNTED IN REPRODUCTION APPARATUS
EMD SYSTEM MEDIUM/SCMS SYSTEM MEDIUM
MEDIUM TYPE ①TYPE OF MEDIUM
②ROM/RAM

RIGHT CLEARING (PROFIT DISTRIBUTION)
USE DATA

ID OF CONCERNED ENTITY
MEDIUM ID

MEDIUM TYPE

ID OF MEDIUM DEVELOPING MANUFACTURER
ID OF OTHER CONCERNED ENTITY TO WHICH
PROFIT SHOULD BE DISTRIBUTED
ID OF REGISTERED THIRD PARTY RELIABLE
ORGANIZATION

RECORDING APPARATUS HNG-ID EMD SYSTEM APPARATUS/SCMS SYSTEM **APPARATUS** BIT STREAM RECODER OR/NOT SIGNAL PARAMETERS COMPRESSION CODEC METHOD DISPLAY CAPABILITY OF MONITOR CONNECTED PARAMETER CONVERSION FUNCTION EXISTS/NOT EXIST (WHERE IT EXISTS, WHICH CONVERSION FUNCTION IS HELD?) EG. 1BIT, 1. 2882M->16BIT, 44. 1K RIGHT CLEARING (PROFIT DISTRIBUTION) USE DATA ID OF CONCERNED ENTITY

ID OF APPARATUS DEVELOPING MANUFACTURER ID OF OTHER CONCERNED ENTITY TO WHICH PROFIT SHOULD BE DISTRIBUTED ID OF REGISTERED THIRD PARTY RELIABLE MEDIUM MOUNTED IN RECORDING APPARATUS
EMD SYSTEM MEDIUM/SCMS SYSTEM MEDIUM

(2)ROM/RAM

TYPE OF MEDIUM

RIGHT CLEARING (PROFIT DISTRIBUTION)
USE DATA
ID OF CONCERNED ENTITY

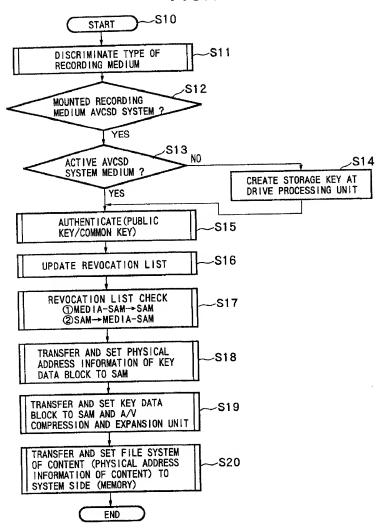
MEDIUM ID
ID OF MEDIUM (DEVELOPMENT MAKER)
ID OF OTHER CONCERNED ENTITY TO WHICH
PROFIT SHOULD BE DISTRIBUTED
ID OF REGISTERED THIRD PARTY RELIABLE
ORGANIZATION

MANY CODECPONDENCE

	RECORDING MEDIUM 2-3	
NE-TO-MANY CORRESPONDENCE)	RECORDING MEDIUN 2-2	
	RECORDING MEDIUM 2-1	
	CONTENT REPRODUCTION REPRODUCTION RECORDING RECORDING APPARATUS 2 APPARATUS 2 APPARATUS 2	
MULTANEOUS (RECORDING MEDIUM 1	
NETWORK (SII	RECORD ING APPARATUS 1	
USAGE SPACE EXAMINATION IN HOME NETWORK (SIMULTANEOUS ONE-TO-MANY CORRESPONDENCE)	REPRODUCT I ON	
	REPRODUCT I ON	
ISAGE SP	CONTENT	3

The state of the s

FIG.17



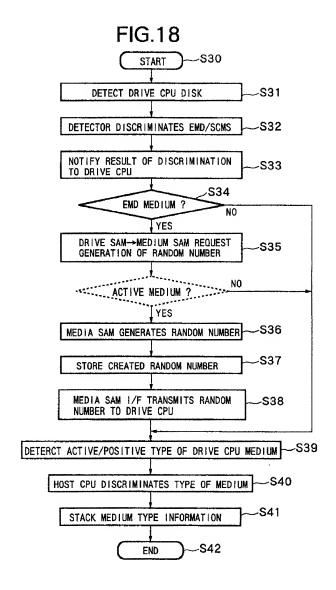
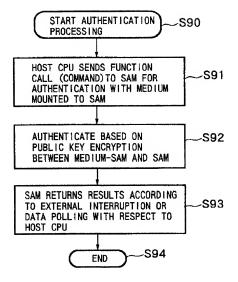
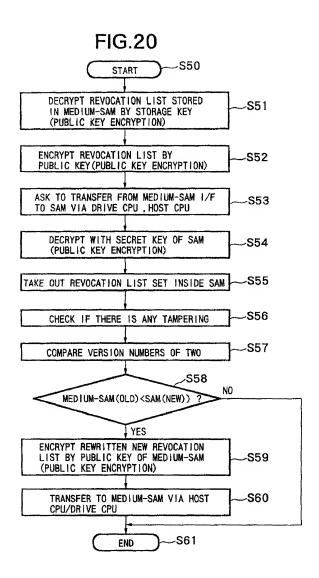
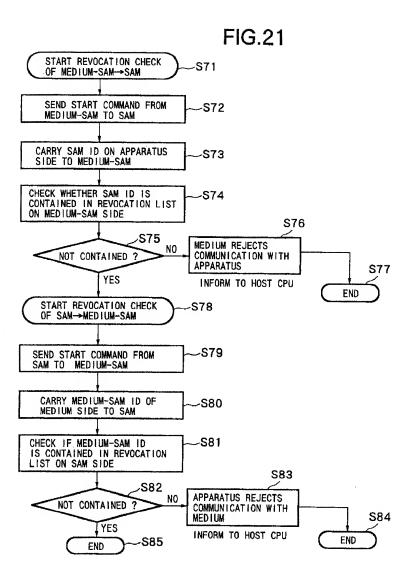


FIG.19





100 100 4.45 (4.52)



1 420.

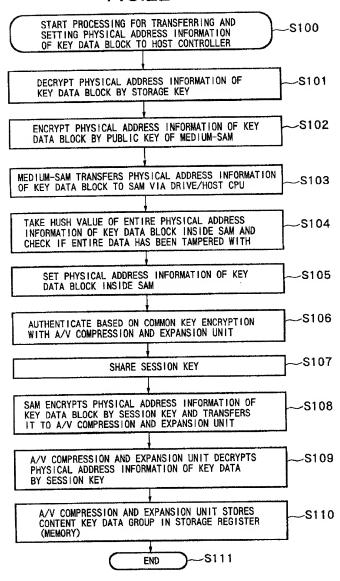


FIG.23

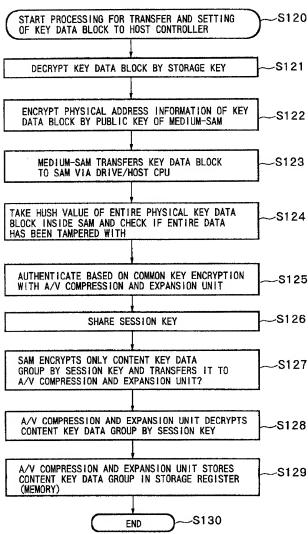


FIG.24

A Pro-

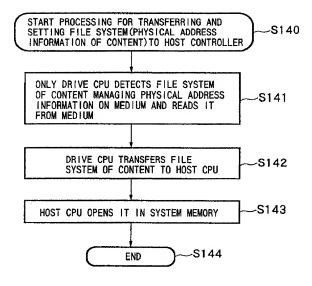
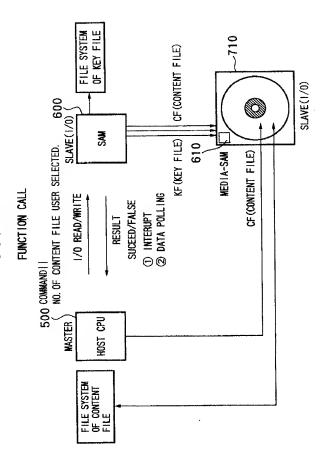
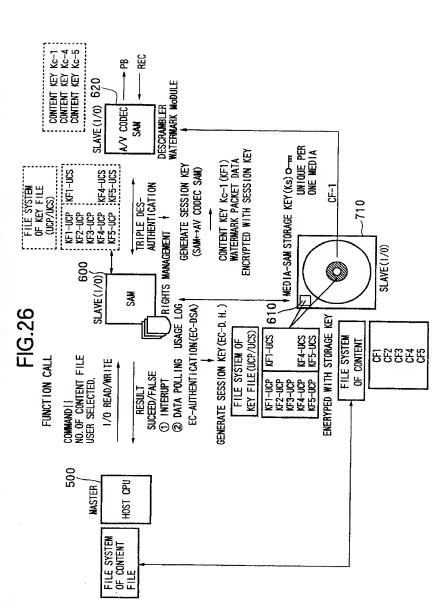


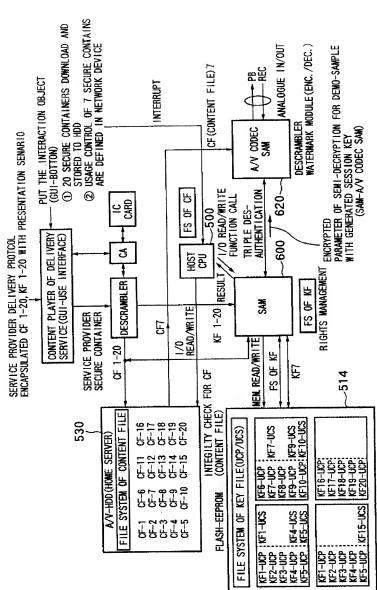
FIG.25

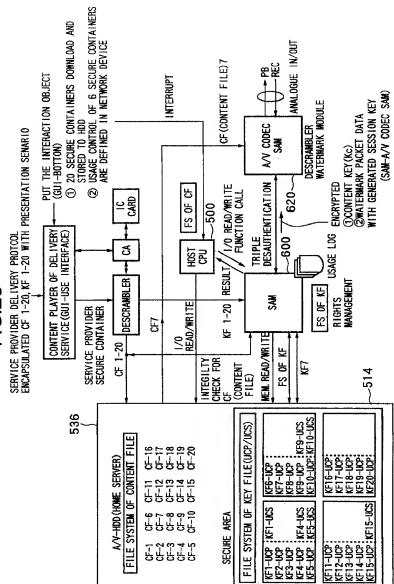


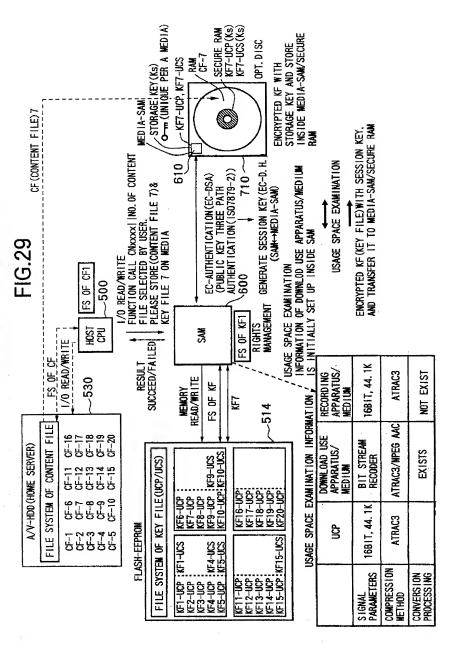
2.48

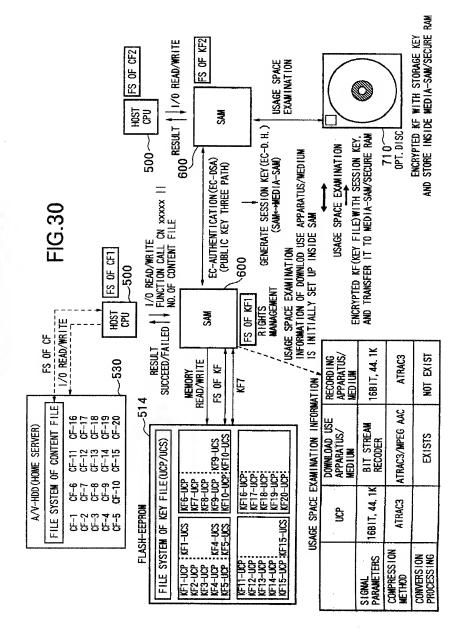


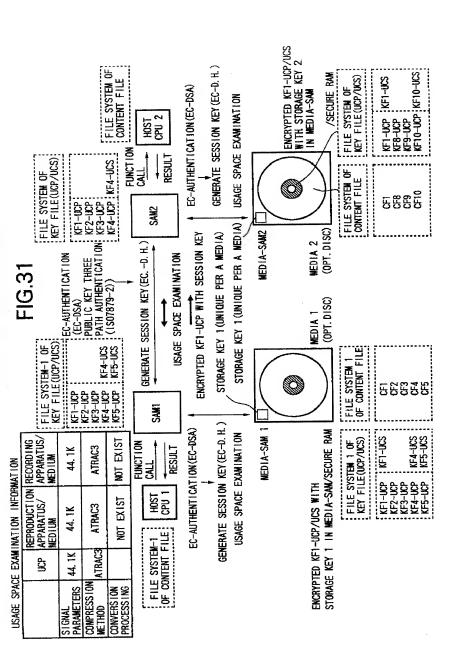










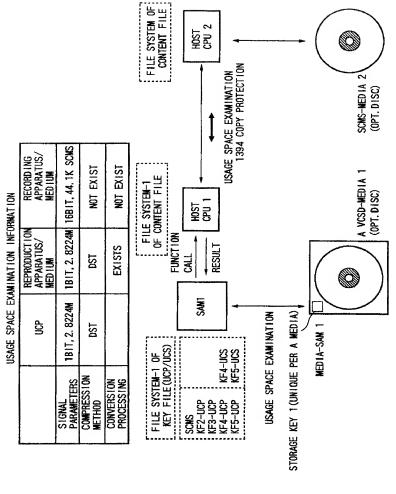


4.5 %

	FIG. 32 FILE SYSTEM-1 OF FILE SYSTEM-1 OF	E (UCL'/ UCS):	• • • • • • • •	KF4-UCP KF	GENERATE SESSION KEY (ECD. H.) CALL CALL HOST	IISAGE SPACE EXAMINATION	ENCRYPTED KF1-UCP WITH SESSION KEY	STORAGE KEY 1 (UNI QUE PER A MEDIA) DRIVE STORAGE KEY 1 (UNI QUE PER A MEDIA).	MEDIA-SAM2	MEDIA 1 MEDIA 2	SC)	OF CONTENT FILE CONTENT FILE SYSTEM OF CONTENT FILE (UCP/UCS)	<u>F</u>	CF3 KF9-UCP CF9 KF9-UCP CF5 CF5 CF5 CF10-UCP KF10-UCS	
RMAT I ON	REPRODUCTION RECORDING APPARATUS/ APPARATUS/ MEDIUM MEDIUM	44. 1K	ATRAC3	EXISTS 44.1K NOT EXIST	FUNCT ION	RESULT	EC-AUTHENTICATION (EC-DSA)	GENERATE SESSION KEY (EC-D.H.) USAGE SPACE EXAMINATION	MEDIA-SAM 1	=	STORAGE KEY 1 IN MEDIA-SAM/SECURE RAM	FILE SYSTEM 1 OF KEY FILE(UCP/UCS)	ZP KFT-UCS	Y KF4-UCS Y KF5-UCS	
USAGE SPACE EXAMINATION INFORMATION	REPRODUCT 10 APPARATUS/ MEDIUM	2. 8224M	TSO	EXISTS 44. 1	HOST HOST		EC-AUTHENT 10	erate sessic Usage space		ENCRYPTED KEI-UCP/UCS WITH	IN MEDIA-SA	FILE KEY F	KF1-UCP	KF3-UCP KF4-UCP KF5-UCP	
ACE EXAMI	d On	2.8224#	DST		FILE SYSTEM-1	CONTENT	_	e.		PTED KF1	GE KEY 1				
USAGE SPA		SIGNAL PARAMETERS	COMPRESS I ON METHOD	CONVERSION PROCESSING	=======================================	9				ENCRY	STORA				

FIG.33 FILE SYSTEM-1 OF FILE SYSTEM OF KEY FILE (UCP/UCS)	KF1-UCS (EC-DSA) PUBL IC KEY THREE	ION: KF3-UCP KF4-UCP KF4-UCS		SAM1 GENERATE SESSION KEY (ECD. H.) SAM2 CPU Z USAGE SPACE EXAMINATION	ENCRYPTED KF1-UCP WITH SESSION KEY EC-AUTHENTICATION (EC-DSA)	STORAGE KEY 1 (UNIQUE PER A MEDIA) GE	STORAGE KEY 1 (UNIQUE PER A MEDIA)	MEDIA-SANZ C	(OPT. DISC) (OPT. DISC) /SECURE RAM	OF CONTENT FILE CONTENT FILE CONTENT FILE CONTENT FILE	CF1 CF1 CF1 KF1-UCS CF2 CF8 KF1-UCS CF9 KF9-UCP CF9 KF9-UCP CF9 KF9-UCP CF10 CF5 CF5 CF10 KF10-UCS CF5
ATION RECORDING APPARATUS/ MEDIUM	16BIT, 44. 1K	ATRAC3	ICINCTION	CALL	TION (EC-DSA	V KEY (EC-D. H	EXAMINATION	MEDIA-SAM 1	H/SECURE RAN	FILE SYSTEM 1 OF KEY FILE (UCP/UCS)	P KF1-UCS P KF4-UCS P KF5-UCS
USAGE SPACE EXAMINATION INFORMATION REPRODUCTION RECORDING APPARATUS/ MEDIUM MEDIUM	#	ATRAC3	NOI EXISI	HOST CPU 1	EC-AUTHENTICATION (EC-DSA)	GENERATE SESSION KEY (EC-D. H.)	USAGE SPACE EXAMINATION		ENCRYPTED KF1-UCP/UCS WITH STORAGE KEY 1 IN MEDIA-SAM/SECURE RAM	FILE S KEY FI	KF1-UC KF2-UC KF3-UC KF4-UC KF5-UC
SPACE EXAM	16BIT, 44. 1K	ATRAC3		FILE SYSTEM-1 OF CONTENT FILE		ee.			ENCRYPTED KF1		
USAGE	SIGNAL PARAMETERS	METHOD CONVERSION	PROCESSING						ш 07		

	FILE SYSTEM-1 OF	EC-AUTHENTICATION FILE (FC-DCA)	3 <u>1</u> 112	(1S07879-2)) KF4-UCP KF	CALL	USAGE SPACE EXAMINATION RESULT CPU 2	ENCRYPTED KF1-UCP WITH SESSION KEY CC-AUTHENTICATION (EC-DSA)	, STORAGE KEY 1 (UNIQUE PER A MEDIA) GENERATE SESSION KEY (EC-D.H.)	STORAGE KEY 1 (UNIQUE PER A MEDIA)	MEDIA-SAM2	MEDIA 1 MEDIA 2 (OPT. DISC) (OPT. DISC)	OF CONTENT FILE SYSTEM OF KEY FILE SYSTEM OF CONTENT FILE KEY FILE (UCP/UCS)	CF1
USAGE SPACE EXAMINATION INFORMATION	UCP APPARATUS/ APPARATUS/ MEDIUM MEDIUM	1681T, 44. 1K 1681T, 44. 1K 1681T, 44. 1K	ATRAC3 ATRAC3 ATRAC3	NOT EXIST NOT EXIST	FILE SYSTEM-1 HOST CALL		EC-AUTHENTICATION (EC-DSA)	GENERATE SESSION KEY (EC-D. H.)	USAGE SPACE EXAMINATION	MEDIA-SAM 1	ENCRYPTED KF1-UCP/UCS WITH STORAGE KEY 1 IN MEDIA-SAM/SECURE RAM	FILE SYSTEM 1 OF KEY FILE(UCP/UCS)	KT1-UCP KF1-UCS KF2-UCP KF3-UCP KF4-UCS KF5-UCP KF5-UCS
USAGE SPA		SIGNAL PARAMETERS 1681		CONVERSION PROCESSING	l i	0 TO					ENCRYI STORA(



	-	FILE SYSTEM-1 OF KEY FILE (UCP/UCS)			KF5-UCP KF5-UCS FILE SYSTEM OF	SAM2 CALL HOST	D. H.)	USAGE SPACE EXAMINATION GENERATE SESSION KEY (EC-D. H.)	(V)	(586	CF10				
	RECORDING Medium	SCMS					EC-AUI NEN	ienerate se	JSAGE SPACE	E KEY 1 (UN	7	(OPT. DISC)	MI FILE	<u></u>		
			6BIT, 44. 1K	ATRAC3	EXISTS	SAM1				STORAG	厅		FILE SYSTEM 1 OF CONTENT FILE	E	76.5	E.
USAGE SPACE EXAMINATION INFORMATION	APPARATUS MEDIUM APPARATUS	AVCSD	-			FUNCTION	L RESULT	EC-AUTHENTICATION (EC-DSA)	GENERATE SESSION KEY (EC-D. H.)	USAGE SPACE EXAMINATION	MEDIA-SAM 1	ENCRYPTED KF1-UCP/UCS WITH STORAGE KEY 1 IN MEDIA-SAM/SECURE RAM	FILE SYSTEM 1 OF KEY FILE (UCP/UCS)	UCP KF1-UCS	UCP UCP KF4-UCS	1
ACE EXAMINATIO	REPRODUCT 10N APPARATUS	AVCSD	16B1T, 44.1K 16B1T, 44.1K	ATRAC3	NOT EXIST	TEM-1 HOST		EC-AUTHENT I	GENERATE SESS	USAGE SPAC		ENCRYPTED KF1-UCP/UCS WITH STORAGE KEY 1 IN MEDIA-SAM		KF1-UCP	KF3-UCP KF4-UCP	XTS.
USAGE SP	dOn	AVCSD	16BIT, 44. 1K	ATRAC3		FILE SYSTEM-1						ENCRYPTED STORAGE KE				
				COMPRESSION METHOD	CONVERSION PROCESSING											

